

REMARKS

The Examiner rejected Claims 1-3 and 5-10 under 35 USC 103(a) as being obvious over U.S. Patent No. 4,150,079 to Chang (Chang) in view of U.S. Patent No. 4,476,170 to Jabarin (Jabarin).

Applicant's invention as set forth in Claim 1 is directed to a process for preparing a blow molding preform. The process comprises the steps of:

- 1) melting polymer flakes in a plasticating screw extruder, to prepare a homogeneous stream of hot polymer melt at the discharge of the extruder;
- 2) cooling the polymer melt stream to a temperature at least 20 degrees Centigrade below the extruder discharge temperature, by heat exchange with a liquid heat transfer medium; and
- 3) forming the cooled polymer melt into a blow molding preform.

All of the remaining Claims 2-10 contain at least the same features and limitations as Claim 1.

Chang discloses a method for injection forming a polymer preform while controlling the crystallization of the thermoplastic material. Chang's process comprises filling a mold cavity with thermoplastic, and applying various pressure regiments to the thermoplastic while it is cooled within the mold. The nozzle 21 of the plasticizer 20 feeds thermoplastic polymer directly into the accumulation chamber 32, and thereafter into the mold 40 (column 8, lines 44-66). The mold 40 is cooled by internal channels 44 (column 8, line 67). In fact, Chang teaches that cooling takes place only at one location, viz, within the forming mold (see column 2, line 46, column 5, line 17, column 7, lines 11-12, etc.). Thus, Chang fails to disclose Applicant's step 2 of cooling the melt between Chang's plasticizer and mold injection mechanism.

Jabarin discloses a method for blow molding an already-prepared preform into a container. Jabarin does not disclose a process for preparing a blow molding preform, as claimed by Applicant. Jabarin's process includes heating an already-prepared preform, and blow molding the heated preform in a mold cavity that contains internal mold heating and cooling channels. Thus, the blow molding mold may be hearted or cooled by passing a heating or cooling liquid through the channels.

Jabarin does not cure the deficiencies of Chang. Neither reference, alone or in combination, discloses Applicant's step 2 as set forth hereinabove. Applicant respectfully submits that the claimed process is not rendered obvious over Chang in view of Jabarin. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the 35 USC 103(a) rejection of Claims 1-3 and 5-10.

The Examiner rejected Claim 4 under 35 USC 103(a) as being obvious over Chang in view of Jabarin and further in view of U. S. Patent No. 6,320,014 B1 to Takahashi et al. (Takahashi).

Takahashi discloses polyester pellets. Takahashi does not disclose a process for preparing a blow molded preform. Takahashi does not disclose the step of cooling a polymer melt stream at the discharge of a screw extruder, as is required in Applicant's process as set forth in Claim 4. Takahashi does not cure the deficiencies of Chang and Jabarin.

Applicant respectfully submits that the Examiner has not demonstrated the obviousness of Applicant's claimed invention, given Chang in view of Jabarin and Takahashi. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the 35 USC 103(a) rejection of Claim 4.

Applicant has made a sincere effort to distinguish the claimed invention over the cited prior art. If, after considering this response, the Examiner feels that there are any issues that remain unresolved, the Examiner is cordially invited to telephone the undersigned Attorney at 419-874-1100 to discuss any such matters. Accordingly, allowance of Claims 1-10 is earnestly solicited.